I CLAIM:

1. A vector error diffusion (VED) method employable in cycles with respect to a bi-tonal color printing engine which prints bi-tonal color images in a device output color space, said method, with respect to each cycle, comprising

acquiring input color-image data which is characterized with an input color space,

processing, with available pre-established VED accumulated error data, such input data to produce a VED-processed input color-image data stream,

from such VED-processed input color-image data stream, creating, without employing interpolation, a VED-processed output color-image data stream which is characterized by the mentioned device output color space, and which is suitable for delivery to and use by the mentioned printing engine, and

changing, as appropriate for the next cycle, the VED accumulated error data which will be employed in that next cycle as pre-established VED accumulated error data.

2. The method of claim 1, which further comprises, at the conclusion of each cycle, delivering the associated output color-image data stream to the printing engine.

3. The method of claim 1, wherein the input, and the device output, color spaces are different.

4. The method of claim 1, wherein the input color space is L,a,b color space, and the device output color space employed is C,M,Y color space.

5. The method of claim 1, wherein said creating includes utilizing a threshold luminosity value on one side of which all associated pixels are declared to be white, and on the other side of which, all pixels are declared to have a color which is other than white.

6. The method of claim 1, wherein said creating includes employing a color-value data/palette containing color values based upon device output-color-space-determined values for the primary and secondary colors which the printing engine is capable of printing.

7. The method of claim 6, wherein said creating further includes employing, in the mentioned color-value data/palette, additional, fictional color values based upon device output-color-space-selected values for arbitrary C', M' and Y' colors which lie at vector distances that are intermediate the primary C, M and Y colors and white.

8. The method of claim 4, wherein said creating includes employing a color-value data palette containing color values based upon device output-color-space-determined values for the primary and secondary colors which the printing engine is capable of printing, the step of creating includes employing, in addition to luminance-value thresholding to declare certain colors to be white, a color data palette which contains solely a set of device output-color-space pixel values based upon spectrophotometric evaluated actual output print engine performance, coupled with three fictional device output color space values which lie intermediate the primary device output-color-space values and white.

9. The method of claim 8, wherein said creating further includes employing, in the mentioned color-value data palette, additional, fictional color values based upon device output-color-space selected values for arbitrary C', M' and Y' colors which lie at vector distances that are intermediate, respectively, the primary C, M, and Y colors and white.

10. A vector error diffusion (VED) method employable in cycles with respect to a bi-tonal color printing engine which prints bi-tonal color images in a device output color space, said method, with respect to each cycle, comprising

acquiring input color-image data which is characterized with an input color space, and

from such acquired input data, creating a VED-processed output color-image data stream which is characterized by the mentioned device output color space, and as a part of said creating, utilizing a threshold luminosity value to declare all pixels residing on one side of that threshold value to be white pixels, and all pixels residing on the other side of the threshold value to be other than white pixels.

11. A vector error diffusion (VED) method employable in cycles with respect to a bi-tonal color printing engine which prints bi-tonal color images in a device output color space, said method, with respect to each cycle, comprising,

acquiring input color-image data which is characterized with an input color space,

generating, relative to and specific for such an engine, an output-selection color-value data palette which correlates, for other than white, and solely for primary and secondary colors in the device output color space, specific input color-space pixel color values with device output-color-space pixel color values that have been predetermined for image printing by the engine,

employing that data palette, and from the acquired input data, creating a VED-processed output color-image data stream in which individual pixels are described in terms of device output-color-space color values, and wherein said employing involves (a) comparing input pixel values to determine the closest match with output pixel values in the palette, and (b) selecting for output delivery from the palette to the printing engine the "closest-distance" output pixel values.